Published Weekly by

#### THE NATIONAL GEOGRAPHIC SOCIETY

(The National Geographic Society is a scientific and educational Society, wholly altruistic, incorporated under the Federal law as a non-commercial institution for the increase of geographic knowledge and its popular diffusion.)

General Headquarters, Washington, D. C.

#### CONTENTS FOR WEEK OF APRIL 10, 1922. Vol. 1. No. 10.

- 1. Traversing the British Empire In Seven-League Boots.
- 2. "Chow Time" at the Aquarium.
- 3. The Yukon: Mississippi of the North.
- 4. Where Our Imports Come From-Rubber.
- 5. Yorktown, Va.: Where the Revolution Was Won.



® National Geographic Society.

#### THE MAIN STREET OF YORKTOWN, VA. (See Bulletin No. 1.)

To the left is the first custom-house in America. Here also is the house of Gen. Nelson, who offered twenty guineas to the first cannoneer who would hit his house, saying that it meant nothing to him while it harbored the enemy of his country—Cornwallis. A cannon ball embedded in the chimney recalls the story. Both the ox-cart and the automobile may be seen on Yorktown streets.

#### HOW TO OBTAIN THE BULLETIN

The Geographic News Bulletin is published weekly throughout the school year (thirty issues) and will be mailed to teachers for one year upon receipt of 25 cents (in stamps or money order). Entered as second-class matter, January 27, 1922, at the Post Office at Washington, D. C., under the Act of March 3, 1878. Acceptance for mailing at special rate of postage provided for in section 1163, Act of October 3, 1917, authorized February 9, 1922.

Published Weekly by

#### THE NATIONAL GEOGRAPHIC SOCIETY

(The National Geographic Society is a scientific and educational Society, wholly altruistic, incorporated under the Federal law as a non-commercial institution for the increase of geographic knowledge and its popular diffusion.)

General Headquarters, Washington, D. C.

#### CONTENTS FOR WEEK OF APRIL 10, 1922. Vol. 1. No. 10.

- 1. Traversing the British Empire In Seven-League Boots.
- 2. "Chow Time" at the Aquarium.
- 3. The Yukon: Mississippi of the North.
- 4. Where Our Imports Come From-Rubber.
- 5. Yorktown, Va.: Where the Revolution Was Won.



® National Geographic Society.

#### THE MAIN STREET OF YORKTOWN, VA. (See Bulletin No. 1.)

To the left is the first custom-house in America. Here also is the house of Gen. Nelson, who offered twenty guineas to the first cannoneer who would hit his house, saying that it meant nothing to him while it harbored the enemy of his country—Cornwallis. A cannon ball embedded in the chimney recalls the story. Both the ox-cart and the automobile may be seen on Yorktown streets.

#### HOW TO OBTAIN THE BULLETIN

The Geographic News Bulletin is published weekly throughout the school year (thirty issues) and will be mailed to teachers for one year upon receipt of 25 cents (in stamps or money order). Entered as second-class matter, January 27, 1922, at the Post Office at Washington, D. C., under the Act of March 3, 1878. Acceptance for mailing at special rate of postage provided for in section 1163, Act of October 3, 1917, authorized February 9, 1922.



Published Weekly by

#### THE NATIONAL GEOGRAPHIC SOCIETY

(Founded in 1888 for the Increase and Diffusion of Geographic Knowledge)

General Headquarters, Washington, D. C.

### Traversing the British Empire In Seven-League Boots

WHAT is your precise idea of the British Empire?

You think of Russia as a vast area, because it looks to be so on the map. But exactly how large, in area and population, do you conceive the British Empire to be? "A little island with a lot of possessions," was the clearest reply to be had from one class.

Scarcely a day passes without some important news of the British Empire—such news as the granting of independence to Egypt, or the disturbances in

India.

The British Empire is at once the greatest and most peculiar empire which the world has known. Its flag flies over more than a fifth of the land surface of the earth and over about a quarter of the inhabitants of the globe.

This vast territory, amounting to nearly thirteen million square miles, is six times the size of the Roman Empire at its greatest extent, more than three times the size of the present French "empire," and once and a half as large as the next greatest empire of modern times, the Russian. If all the land of the British Empire could be formed into one tract it would require the entire continent of Africa and half the United States to cover it.

#### Stepping Stones Around the World

Portions of the British Empire are strewn in and between the oceans of the world like protruding flagstones and pebbles in a pond. A giant with seven-league boots that could cover 1,000 miles at each normal step with an occasional leap of 1,200 miles could walk a large part of the distance around the world dry-

shod and touch only British territory.

The first 1,000-mile step from England would be to tiny Gibraltar, less than two square miles in area, the smallest, yet strategically one of the most important units of the empire. A 1,200-mile hop to the east would reach Malta, the island headquarters of the British Mediterranean fleet. As compensation for the longer leap, the wearer of the seven-league boots could until March 16, of this year, have taken a short step of 700 miles to the northwestern corner of Egypt, and for the next 1,200 miles to the southeast could have traversed British territory in as leisurely a manner as he pleased.

From the southeastern boundary of the Anglo-Egyptian Sudan on the Red Sea to the island of Perim, a second Gibraltar at the sea's mouth, the step would be only about 500 miles. Aden lies only a hundred miles to the east and the Aden Protectorate stretches for 800 miles farther to the eastward, a narrow fringe along the south coast of Arabia. From the Kuria Muria islands which mark approximately its eastern limit to the nearest part of India is a "step" of

only 700 miles.

India forms a land bridge for nearly 3,000 miles to the southernmost point of Burma. From there to the nearest point of British territory in the Straits Settlements is a bare 300 miles. From Singapore at the southernmost point of the Straits Settlements to British Borneo is less than 400 miles.

#### Australia Isolated

To reach isolated Australia by thousand mile steps on British territory the giant pedestrian would have to make use of tiny Christmas island, about 800 Bulletin No. 1, April 10, 1922 (over).



RUBBER IS "CURED" BY SMOKING IT IN THIS FASHION

@ National Geographic Society.

The scene here shown is the interior of a native hut in Peru. The ball grows larger and larger as the milky fluid is poured over it. Then these huge balls are tied together to form a raft and are floated down stream to an Amazon port. Even after they are put aboard a steamer these rubber balls must be carried down the Amazon for more than 2,868 miles before they start their ocean vovage.

Published Weekly by

#### THE NATIONAL GEOGRAPHIC SOCIETY

(Founded in 1888 for the Increase and Diffusion of Geographic Knowledge)

General Headquarters, Washington, D. C.

### "Chow Time" at the Aquarium

AS INTERESTING as feeding time at a zoo\* is "chow time" at an aquarium. A suave and tactful head waiter has one rival in the expert entrusted with feeding the fish at an aquarium.

The principal article of the fish diet is—lobster! And, if anything, the fish are fussier about their food than the human diner. For lobster is something of a luxury for mankind; but is a necessity for many fishes.

#### "Forcible Feeding" Sometimes Necessary

Moreover the "head waiter" at the aquarium must be also a dietitian and a warden. For the steely-eyed captives who prowl about their plate glass homes lack exercise as much as they do privacy. If they like what they are fed they are apt to overeat. If they don't they may go on a hunger strike, and forcible feeding must be resorted to now and then.

Commenting on the proper feeding of aquarium fishes, Louis L. Mowbray, director of the Miami Aquarium, a foremost authority on warm, salt water sea life, says:

"We feed the fishes three times a week regularly. This is sufficient, as fish in an aquarium do not get the exercise nor use up the energy that fishes in the open sea do in order to obtain food for their existence. Considerable caution has to be taken to prevent the fish from overfeeding, for as a rule they are gluttons. Fish will pack their stomachs so tightly while being fed that digestion is impossible and they will have to disgorge themselves, which is dangerous in aquarium tanks, as the water fouls very rapidly. This soon causes death to the other fishes if not remedied. A whole tank of fish may be lost in this way in a very short time.

#### "Tiger of the Sea" a Hunger Striker

"Some of the predacious fish, for example, the barracuda, popularly called the tiger of the sea, and the moray, the great eel-like skulker of the coral reefs with the powerful fangs of the rattlesnake, at times refuse food for long intervals when dead food is offered to them. The moray has been known to go six months without food and it is often fed forcibly. When fish are once accustomed to take dead food it is not advisable to give them live food again unless it can be obtained regularly for future feeding as they will often go on a hunger strike for the much preferred live food after it has once been provided for them.

"We have a great number of fishes of various varieties here, and there are many details to be attended to in order properly to keep these fishes, but proper feeding is the greatest problem of all things with which the aquarist must contend.

#### Fish on the Fishes' Menu

"At present 180 pounds of crawfish or spiney lobster, 60 pounds of fresh fish and a considerable quantity of sea weeds is our total weekly market order. These are the staples. Carnivorous fishes will eat, as a rule, most kinds of fish flesh, but they sometimes become stalled and must be fed with articles containing hard parts, such as whole crabs. This hard food is necessary for the

<sup>\*</sup>See Bulletin No. 2, February 13, 1922.

miles south of Singapore. The distance from there to the nearest point in Aus-

tralia could be covered by a single 1,000-mile "step."

From eastern Australia a 1,000-mile step would reach Norfolk Island. Thence a half-step would reach New Zealand. From Norfolk Island the giant pedestrian could pick his way with ease by steps ranging from a few miles to 1,000 miles along the route of the British trans-Pacific cable for a distance of more than 3,000 miles to Fanning Island. This infinitesimal island is practically the easternmost outpost among the units of the British Empire that are closely connected with one another.

East and northeast is a vast expanse of the Pacific without islands. To the southeast, where a halting island bridge exists, many of the islands are in possession of France. This lack of British islands in the eastern Pacific is strikingly shown by the fact that the British trans-Pacific cable extends under water from Fanning Island to Canada, a distance of 3,458 miles, the longest stretch of unrelayed cable in the world. Beyond the Pacific breach lies Canada, the greatest of the empire's units, and to the south of it are the important West Indies possessions.

#### An "Empire" by Title

The British empire is in a sense not an empire at all. There is no "emperor of the British Dominions," only an "Emperor of India"; but by common usage the great group of dominions, possessions and protectorates has come to be

called "the empire."

The empire is made up of strikingly different units. At one end of the scale are the self-governing, responsible Dominions—Canada, Australia, New Zealand, Newfoundland, and South Africa—which function much as they please under a governor-general who does not govern and a royal veto which is never exercised. At the other end are crown colonies such as British Honduras and the Gold Coast which are governed entirely by officials appointed in London; Egypt, which was under a single high commissioner; North Borneo, which is administered by a trading company; protectorates such as Zanzibar and Uganda, which are under only tenuous control; and the settlement of Wei-hai-wei in China, held under a 99-year lease, which is to be restored to China.

Bulletin No. 1, April 10, 1922.

Published Weekly by

#### THE NATIONAL GEOGRAPHIC SOCIETY

(Founded in 1888 for the Increase and Diffusion of Geographic Knowledge)

General Headquarters, Washington, D. C.

### The Yukon: Mississippi of the North

ALASKA just now is attracting attention because of problems presented by its administration under various government bureaus, but when that question is settled, we are apt to continue to hear more and more about this territory because of its rapid economic development.

Each spring the opening of the Yukon River to navigation serves to bring to the attention of stay-at-home Americans one of the greatest of their rivers.

The Yukon, despite the general failure to recognize it as such, is one of the great rivers of the world. It is over 2,300 miles long and is both the longest and the largest river flowing into the Pacific waters in the western hemisphere, surpassing by a considerable margin its nearest competitors, the Columbia, and the Colorado. Among all the rivers of North America the Yukon is surpassed in length only by the Mississippi system and the Mackenzie. It is longer than the St. Lawrence as well as all the other rivers except the Mississippi system which flow into the Gulf of Mexico or the Atlantic.

#### Among Greatest Rivers of the World

Though the discharge of the Yukon has not been accurately measured it is its tremendous volume of water rather than its length that causes it to be ranked as a great river. It is of course far outdistanced by the vast Amazon, greatest of rivers, and the Congo, which probably ranks second. But the Yukon has been estimated to have three-fourths of the volume of discharge of the Mississippi, and if this estimate be accurate the stream which it pours into the sea is probably among the half dozen greatest in the world.

To Alaska, heretofore having no highway of steel into its interior, the Yukon has been indispensable. Because of the shallow bars at its mouth, ocean steamers cannot enter the river; but at the harbor of St. Michael, just north of the mouth, freight is transferred to shallow-draught, stern-wheel river steamers which ascend the stream not only throughout the breadth of Alaska, but for

several hundred miles into Canada.

The Yukon, flowing through Alaska roughly from east to west, divides the territory into northern and southern halves. Large areas along the banks of the river and its tributaries as well as at considerable distances from the stream can thus be served by freight boats. The principal objectives of the river steamers, however, are Dawson, on the Yukon about 60 miles in Canada, and more than 1,300 miles from the mouth, and Fairbanks, the "metropolis" of interior Alaska, near the head of navigation on the Tanana, a tributary of the Yukon.

#### Route of Telegraph Line to Europe

The Yukon is an international river, rising nearly 500 miles within Canadian territory, and sweepng in a great arc to the north and east. Although the river is over 2,000 miles long, one of its sources, a small lake, is within twenty-five miles of the salt water to which it makes such a round-about journey.

The existence of such a large river as the Yukon in the far north was long unsuspected. A Russian lieutenant, Zagoskin, entered its mouth by boat in 1842 and traversed it for several hundred miles. The Hudson's Bay Company had discovered its headwaters in Canada; but the two bits of information were not

Bulletin No. 3, April 10, 1922 (over).

proper functioning of the glands which secrete the gastric juices. The continuous feeding of soft foods tends to increase these juices which are not wholly assimilated, and the feeding of hard food acts as a relief by regulating the flow. Another reason for the feeding of hard foods is that the constant feeding of soft

foods causes shrinkage of the stomach from which many deaths occur.

"Herbivorous fishes, such as the parrot-fish family, will eat nearly every variety of the reef seaweeds, from which they obtain a change of diet, as there are many forms of worms, crustaceans and hydroits attached to the weeds, making for the fish what would correspond to a dainty yet wholesome salad with the seaweed as the base. Many vegetable feeders will eat flesh but only when it is secured by unnatural means as they are not built for the seizing of live food.

"Crabs and crawfish are omnivorous. They eat great quantities of seaweeds, flesh, and frequently their own kind. A great many forms are scavengers, therefore it is not a difficult matter to feed them in an aquarium.

#### Big Fish May Get Lion's Share

"In feeding a tank full of fish care must be taken that the big fish and those that are more active do not get all the food just as the big dog in the pack, because of size and bluff, snaps up the lion's share and the smaller and more timid go hungry as a result. The Aquarium official 'waiter' keeps watch of this important matter."

Bulletin No. 2, April 10, 1922.



@ National Geographic Society.

#### AN OCTOPUS IN ONE OF THE TANKS OF THE MIAMI (FLORIDA) AQUARIUM

The octopus is a source of fascination to most people in spite of its repulsive appearance. It has a large, ugly head, a fierce-looking mouth armed with a pair of powerful, horny jaws shaped much like the beak of a parrot, and topped with two diabolical eyes set close together that can send forth a demoniac glare when angry. The grotesque head is mounted on a somewhat oval body from which radiate eight arms usually united at the base by a membrane. The arms, or tentacles, are provided with rows of suckers with which to clasp and cling to its prey with uncanny strength and quickness. The octopus has the faculty of instantly changing color before the very eyes, and is constantly doing strange and weird things, which always attract the attention of the passer-by.

Published Weekly by

#### THE NATIONAL GEOGRAPHIC SOCIETY

(Founded in 1888 for the Increase and Diffusion of Geographic Knowledge)

General Headquarters, Washington, D. C.

### Where Our Imports Come From-Rubber

HE United States manufactured enough rubber tires during the year of . prosperity ending June 20, 1920, to supply the millions of cars that are skimming over her splendid roads and also to ship about forty million dollars worth of them to ports the world over from bonny Scotland to volcano-torn Java. Crude rubber comes to our shores free of duty from places equally as divergent in longitude.

Brazil contributes more than 58 millions of the 575 million pounds which we receive each year, the Dutch East Indies an equal or slightly larger amount, and the British Straits Settlements nearly five times as much as either of these, while sundry contributions of balata, guayule gum, gutta-jelutong, gutta percha, and india rubber come from Japan, Belgian Congo, French Africa, Venezuela, Mexico, Panama, Peru, the British possessions, and many other countries.

#### Did Columbus Also Discover Rubber?

The discovery of rubber or caoutchouc is attributed to Columbus, who reported that he had found the natives of Haiti playing with balls that bounced. Priestley, the great English chemist, found while experimenting with the substance, that it would erase lead pencil marks. For want of a better name, he dubbed it rubber, and the name has stuck and is used almost exclusively in English-speaking countries.

The large balls or loaves of raw rubber imported to America are made, not from the sap, as is ordinarily supposed, but from the milk of the rubber trees. The hydrocarbonaceous substance when it first comes from the trees reminds one

of the juice that comes from the everyday milkweed.

The Para rubber, one of the best of the grades of raw rubber, which got its name from the port of Brazil from which so much of it is shipped, is obtained from trees that thrive in the hot damp forests of the Amazon. Many of the trees measure from 8 to 10 feet in girth and 60 feet in height. The leaves are threelobed and the flowers small and inconspicuous.

#### Resembles Maple Sugar Process

Rubber collectors go through the forests and pick out the trees to be tapped, cut several notches in each and fix below the notch a cup to catch the milk which immediately begins to flow. After a few hours the flow ceases and the cups are emptied into a larger receptacle. A fire is lighted and the nuts of various kinds of palm trees are thrown on it in order to make a dense smoke. Then the natives dip paddles in the rubber latex and hold them in the smoke until the fluid coagulates and forms a thin layer on the paddle. The paddle is dipped into the latex again and again and smoked until a sufficiently large quantity of rubber is collected. It is then removed and rolled into loaves for export. It comes to the manufacturer in this form, brown or black on the outside, gray on the inside, and with a peculiar smoked-fish odor. Inferior grades of rubber usually have a very disagreeable smell.

Natives of Africa frequently covered their bodies with the latex and scraped the rubber off, after there had been sufficient evaporation, and molded it into cubes, but at the present time excellent machines for coagulating the product

have been put into use.

Bulletin No. 4, April 18, 1922 (over)

pieced together. The existence of the river as a stream of great magnitude and length first became really known through the daring and romantic project of installing land telegraph wires between America and Europe across Alaska, Bering Strait and the wastes of Siberia.

Bulletin No. 3, April 10, 1922.

#### Note to Teachers

Since both school and public libraries generally have bound volumes of The National Geographic Magazine it has been suggested that references to articles and pictures in The Geographic concerning topics treated in the bulletins would be helpful. Therefore references which may be of use for further study of the subjects, or for source material in project and problem assignments, are contained in the following bibliography extracted from "The Cumulative Index to the National Geographic Magazine":

#### Alaska

Alaska's New Railway. Vol. XXVIII, pp. 567-589, 20 ills., Dec., 1915. Big Game of Alaska. Bv Wilfred H. Osgood. Vol.

XX. pp. 624-636, 10 ills., July, 1909.
Camel of the Frozen Desert, The (Reindeer). By Carl J. Lomen. Vol. XXXVI, pp. 538-556, 19 ills.,

Carl J. Lomen. Vol. Adaly J. F.
Dec., 1919.
Game Country Without Rival in America. The Proposed Mount McKinley National Park. By Stephen R Capps. Vol. XXXI, pp. 69-84, 14 ills., 1 half-page map, Jan., 1917.
Jack in the Box, A: An Account of the Strange Performances of the Most Wonderful Island in the World (Bogoslof Volcano). By Captain F. M. Munger. Vol. XX, pp. 194-199, 8 ills., Feb., 1998.
Making the Fur Seal Abundant. By Hugh M. Smith. Vol. XXII, pp. 1139-1165, 18 ills., I half-page map, Dec., 1911.
Marking the Alaskan Boundary. By Thomas Riggs,

Making the Fur Seal Abundant. By Hugh M. Smith. Vol. XXII. pp. 1139-1165, 18 ills., 1 half-page map, Dec., 1911.

Marking the Alaskan Boundary. By Thomas Riggs, Jr. Vol. XX, pp. 593-607, 17 ills., July, 1909.

Monarchs of Alaska, The (Mountains). By R. H. Sargent Vol. XX, pp. 610-623, 9 ills., July, 1909.

The National Geographic Society's Alaskan Expedition of 1909. By Ralph S. Tarr and Lawrence Martin. Vol XXI, pp. 1-54, 42 ills., 12 page and half-page maps, Jan., 1910.

Recent Eruption of Katmai Volcano in Alaska. By George C. Martin. Vol XXIV, pp. 131-181, 45 ills., 1 page map, 1 diagram, Feb., 1913.

The Ten Thousand Smokes, Now a National Monument. The President of the United States Sets Aside for the American People the Extraordinary Valley Discovered and Explored by the National Geographic Society. Vol. XXXV, pp. 359-366, 5 ills., April, 1919.

Geographic Society, Vol. XXXV, pp. 392-309, 3 ills., April, 1919. Valley of Ten Thousand Smokes. National Geographic Society Explorations of the Most Wonderful Volcanic Region in the World. By Robert F. Griggs. Vol. XXXVIII, pp. 115-169, 46 ills., 1 panorama, 1 half-page map, Feb., 1918. Volcanoes of Alaska (Fruption of Mt. Katmai in June, 1912). Vol. XXIII, pp. 824-832, 11 ills., August 1912

August, 1912.

(The above is a partial list.)

#### British Possessions

British Columbia: Factors Which Modify the Climate of Victoria, B. C. By Arthur W. McCurdy. Vol. XVIII, pp. 345-348, 2 fourth-page maps, May, 1907. Life on a Vukon Trail. By Alfred Pearce Dennis. Vol. X, pp. 377-391, 8 ills., 1 page map, Oct., 1899. (Continued in the November, 1899.) Monarch of the Canadian Rockies, The. By Charles D. Walcott. Vol. XXIV, pp. 626-639, 13 ills., 1 panorama, May, 1913. Some Tramps Across the Glaciers and Snowfields of British Columbia. By Howard Palmer. Vol. XXI, pp. 457-447, 25 ills., June, 1919. Stikine River in 1898, The. By Eliza R. Scidmore. Vol. X, pp. 1-15, 4 ills., Jan., 1899. British East Africa: New British Empire of the Sudan, The. By Herbert L. Bridgman. Vol. XVII. pp. 241-267, 32 ills., May, 1906. Where Roosevelt Will Hunt. By Sir Harry Johnston, G. C. M. G., K. C. B., D. Sc. Combs, Vol. XX, pp. 207-256, 43 ills., March, 1909. Wild Man and Wild Beast in Africa. By Theodore Roosevelt, Vol. XXII, pp. 1-33, 41 ills., 1 page map, Jan., 1911. British Guiana: Notes from a Naturalist's Experiences in British Guiana. By C. H. Eigenmann. Vol. XXII, pp. 859-870, 8 ills., Sept., 1911. World's Greatest Waterfall, The: The Kaieteur Fall, in British Guiana. By Leonard Kennedy. Vol. XXII, pp. 846-839, 6 ills., 1 page map, Sept., 1911.

British Honduras: ritish Honduras: Notes on Central America. Vol. XVIII, pp. 272-278, 1 ill., 1 half-page map, April, 1907.

British Isles: One Hundred British Seaports. Vol. XXXI, pp. 84-94, 10 ills., 1 page map, Jan., 1917. British, The: Races of Europe, The. By Edwin A. Grosvenor, L. H. D., LL.D. Vol. XXXIV, pp. 441-533, 62 ills., 2 page maps, 1 insert, Dec., 1918. British South Africa: Diamond Mines of South Africa: Diamond Mines of South Africa, The. By Gardiner F. Williams. Vol. XVII, pp. 344-356, 11 ills., June, 1906. Great Britain's Bread Upon the Waters: Canada and Her Other Daughters. Ry William Howard Taft. Vol. XXIX, pp. 217-272, 56 ills., March, 1916. British Isles: One Hundred British Seaports.

Natal: The Garden Colony. By Russell Hastings Millward. Vol. XX, pp. 278-291, 16 ills., March.

1909. British South Africa and the Transvaal. By F. F. Hilder. Vol. XI, pp. 81-96, 7 ills., March, 1900.

#### Rubber Industry

Rubber Plantations in Mexico and Central America. Vol. XIV, pp. 409-414, 7 ills., Nov., 1903.

#### Aquarium

Miami Aquarium: Treasure House of the Gulf Stream: The Completion and Opening of the New Aquarium and Biological Laboratory at Miami, Florida. By John Oliver LaGorce. Vol. XXXIX, pp. 53-68, 5 ills. in black and white, 16 ills. in color, Jan., 1921.

America's Most Valuable Fishes. By Hugh Smith. Vol. XXIII, pp. 494-514, 17 ills., 2

America's Surpassing Fisheries: Their Present Condition and Future Prospects, and How the Federal Government Fosters Them. By Hugh M. Smith. Vol. XXIX, pp. 546-583, 35 ills., June,

1916.
Devil-Fishing in the Gulf Stream. By John Oliver LaGorce. Vol. XXXV, pp. 476-488, 7 ills., June, 1919.
Europe's Endangered Fish Supply: War and the North Sea Fisheries, The. Vol. XXVII, pp. 141-152, 9 ills., 1 half-page map, Feb., 1915.
Fishes that Build Nests and Take Care of Their Young. Vol. XVIII, pp. 440-412, 16 ills., June, 1997.

1907. Fishes that Carry Lanterns. Vol. XXI, pp. 452-456,

Fishes that Carry Lantenns, vol. 334, pp. 36-37, S ills., May, 1910.
Fishing and Hunting Tales from Brazil. By Dewey Austin Cobb. Vol. XX, pp. 917-920, Oct., 1909.
The Glass-Bottom Boat. By Charles Frederick Holder. Vol. XX, pp. 761-778, 17 ills., Sept., 1909.
Interesting Citizens of the Gulf Stream. By Dr. John T. Nichols. Vol. XXXIX, pp. 69-84, 11 ills.,

John T. Nichols. Vol. AXALA, pp. 69-69, 11 HEB, Jan., 1921.
King Herring: An Account of the World's Most Valuable Fish, the Industries It Supports, and the Part It Has Played in History. By Hugh M. Smith. Vol. XX, pp. 701-735, 21 Hs., Aug., 1909. Life on the Grand Banks: An Account of the Sailor-Fishermen Who Harvest the Shoal Waters of North America's Eastern Coasts. By Frederick William Wallace. Vol. XL, pp. 1-28, 29 ills., July, 1921.

ysters: World's Most Valuable Water Crop. By Hugh M. Smith. Vol. XXIV, pp. 257-281, 21 ills.,

March, 1913. March, 1913.

Hen the Father of Waters Goes on a Rampage:

An Account of the Salvaging of Food-fishes from the Overflowed Lands of the Mississippi River. By Hugh M. Smith. Vol. XXXVII, pp. 386, 18 ills., April, 1920.

Certain Citizens of the Warm Sea. By Louis L. Mowbray, Vol. XLI, pp. 27-62, 34 illustrations (16 in full color), January, 1922.

Published Weekly by

#### THE NATIONAL GEOGRAPHIC SOCIETY

(Founded in 1888 for the Increase and Diffusion of Geographic Knowledge)

General Headquarters, Washington, D. C.

### Yorktown, Va.: Where the Revolution Was Won

THE historic battlefield of Yorktown, Va., where the British general, Cornwallis, surrendered, and where for all practical purposes the American Revolution was brought to a victorious conclusion, may soon be made into a shrine to share popularity with Bunker Hill, Valley Forge and Mt. Vernon.

Though Yorktown was not a thriving community nor a place noted for its accessibility during Revolutionary days, it was relatively much more important and much less remote from the daily life of the country than it has been at any time since. Most other American towns were small in those days, ports were few, and railroads were unthought of. As cities have sprung up where there were only hamlets or patches of wilderness before, and as railroads have brought even the two oceans relatively closer together, Yorktown, at a point where little commerce had been developed, and without rail connections, has become in effect more and more remote, and its character as a sleepy village has become more and more emphasized.

#### Site of Famous Surrender a Tiny Village

The Yorktown of today is a community of less than 250 inhabitants with a few fine old colonial homes and a number of less pretentious dwellings. The nearest railroad lies eight miles to the south. In the town is a monument erected in 1881 on the one hundredth anniversary of the surrender of the British. As a reminder of the early importance of Yorktown there still exists the first custom-house in the United States. Near the village are remains of the forts and redoubts whose capture by the Revolutionary soldiers and their French allies marked the real birth of the United States. The scene of Cornwallis' surrender—which was by proxy through his General O'Hara—is believed to be in the open country just south of the village.

Yorktown is on a narrow peninsula lying between the wide estuaries of the James and York rivers, and is where the latter meets Chesapeake Bay. Cornwallis, after scourging Virginia, burning homes, killing and driving off stock, and capturing large numbers of slaves, retired down the peninsula to Yorktown. Lafayette, with a handful of American soldiers followed at a distance. It was when this situation was pointed out to Washington that he was persuaded to abandon his plan to attack New York and instead to take his own forces from West Point and Rochambeau's division from Providence, R. I., to stake all on a battle in the south. The arrival of De Grasse with a French fleet in the Chesapeake, blocking the entrance to that bay and preventing reinforcements reaching Cornwallis, made the defeat of the latter inevitable.

#### Wonderful Harbor Used in World War

It is not strange that Cornwallis considered Yorktown a good location for military headquarters in spite of the ease with which the peninsula might be blocked. It possesses a truly remarkable deep water harbor, and Cornwallis counted on the maintenance of communication by water with the heavy British forces in New York.

Yorktown's harbor was put to good use during the World War and so once more played an important part in the country's martial history. In the mouth of the York river opposite the famous village the greater part of the

Bulletin No. 5, April 18, 1922 (over).

#### Practical Use Recent

Though its properties have long been known, rubber has just within the last century come into everyday practical use. Mackintosh, a canny Scotchman, in 1823 dissolved some rubber in naphtha and spread the solution on a marble slab to dry. He then fastened his rubber sheet between two pieces of fabric and introduced the world to the raincoat.

But it was left for Charles Goodyear, an ardent enthusiast over the possibilities of rubber, who plunged his fortune into the game and died discredited, to make possible the overshoe and the automobile tire. He had mixed some rubber and sulphur and while dissertating on the wonderful qualities of the substance, he let some of the mixture fall upon the door of the red-hot stove near which he was standing. Casually looking down on what he had spilled, he noted with amazement that it had hardened without melting.

Frantically grabbing a knife he scraped the residue from the stove. His friends thought that they had seen him suddenly become insane, particularly as they already regarded him more or less unbalanced on the subject, but he had discovered that it was possible to vulcanize rubber—a process which makes it no longer sensitive to the changes of the seasons and increases its strength and elasticity.

Bulletin No. 4, April 10, 1922.

Atlantic fleet at times rode at anchor. There, behind the defenses at the entrance to the Chesapeake, and further protected by nets and patrols across the mouth of the York, dreadnaughts and lesser vessels were safe from molestation by enemy submarines. Thousands of men were intensively trained for naval duty at this anchorage while the whereabouts of the fleet was kept a profound secret. The Yorktown anchorage was alluded to in official communications throughout the war only as "Base 2."

Bulletin No. 5, April 16, 1922.



D National Geographic Society.

A MOSLEM WOMAN OF CAIRO WEARING THE BLACK BURKO, OR VEIL

In spite of many changes following the war, which culminated in granting of independence to Egypt (see Bulletin No. 1) many of the respectable women of the Nile country cling to the veil. The white gauze veil usually worn by Turkish women is seen, but the heavy black veil and the ringed golden speel worn between the eyes are still preferred by most Egyptian women.

